

REMARKS

Status of the Claims

Claims 1-25 are now present in this application. Claim 1 is independent.

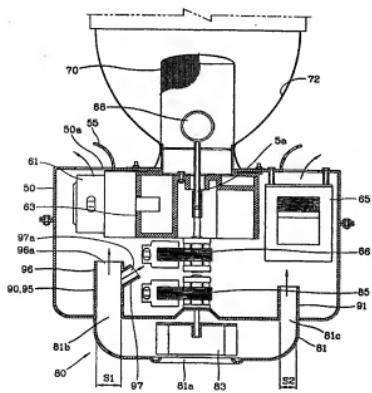
Reconsideration of this application is respectfully requested.

Election of Species Requirement

The Examiner previously made the Election of Species Requirement final, and had withdrawn claims 10-24 from further consideration. Applicants have not canceled these non-elected claims because each of these claims depends, either directly or indirectly, from independent generic claim 1, which is believed to be allowable. Upon allowance of independent claim 1, Applicants respectfully request examination and allowance of these withdrawn claims.

As noted previously, and based on the Examiner's previous examination of dependent claims 17, and 18, Applicants respectfully submit that dependent claims 17-19 also read on the elected Species, based on FIG. 2.

FIG. 2



As described in the present application as a non-limiting example, a fan housing has a first discharge port 81b and a second discharge port 81c. The sectional area S1 of the first discharge port 81b is formed larger than the sectional area S2 of the second discharge port 81c. See page 8, lines 9-18.

In addition, prolonged ducts 90, 91 are formed at the first and second discharge ports 81b, 81c, respectively. Prolonged duct 90 further includes a distribution duct 95 having a first sub discharge port 96a and a second sub discharge port 97a. See page 8, line 21 to page 9, line 5.

The distribution duct 95 is composed of a main duct 96 having the first sub discharge port 96a and a divergent duct 97 having the second sub discharge port 97a and is divided from the main duct 96. See page 9, lines 10-13.

Clearly, claims 17, 18, and 19 are supported by the elected species, and therefore claims 17, 18, and 19 should not have been withdrawn. Examination of these claims in the next communication is respectfully requested.

Rejections under 35 U.S.C. § 103

Claims 1-5, 8, 9, and 25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over El-Hamamsy in view of Mimasu. This rejection is respectfully traversed.

A complete discussion of the Examiner's rejection is set forth in the Office Action, and is not being repeated here.

Applicants respectfully submit that independent claim 1 recites a combination of elements in a cooling structure for a plasma lighting system including "a case in which inner components are mounted" and "a fan housing having at least one inlet port and at least two discharge ports having different discharge flow rates for discharging introduced external air into the case with different flow rates from each other in order to cool heat generation components in the case by introducing external air in the case."

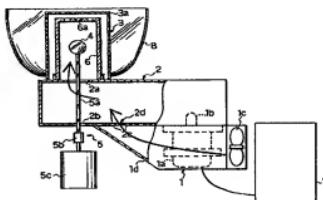
Applicants respectfully submit that this combination of elements as set forth in independent claim 1 is not disclosed or made obvious by the prior art of record, including El-Hamamsy and Mimasu.

The Examiner acknowledges that El-Hamamsy fails to disclose discharge ports having different discharge rates. In order to overcome this deficiency, the Examiner turns to the teachings of Mimasu alleging that Mimasu discloses multiple discharge ports (2a, 2c, 2d) having different discharge flow rates because they have different port sizes (col. 6, ll. 1-10). The Examiner further alleges that it would have been obvious to modify El-Hamamsy in order to cool heat generating elements in the case. Applicants respectfully disagree for a number of reasons.

First, the alleged port 2c and 2d of Mimasu are not discharge ports. Rather, Mimasu discloses an aperture 2d comprised of a plurality of holes 2c for securing communication between the duct 1d and the interior of the waveguide 2 (col. 5, line 67 to col. 6, line 3). As such,

they are provided for securing communication between the duct 1d and the interior of the waveguide 2, not for cooling heat generation components. Rather, the only hole disclosed to providing cooling air to a heating component is power feeding window 2a.

Second, the cooling air generated by the fan is supplied into the blow guide 6 from the power feeding window 2a through the duct 1d, the aperture 2d and the waveguide 2, and blown onto the lamp 4 (col. 6, ll. 3-7). See marked-up Fig. 1 on the next page.



In this arrangement, the only heat generation component after the aperture 2d is the lamp 4, and the only hole providing cooling air to cool the lamp 4 is provided by power feeding window 2a. Consequently, there are not multiple ports providing cooling air to heat generation components. And Mimasu fails to offer any teaching that suggest providing more than one power feeding window, much less power feeding windows having different sizes.

Third, in determining whether it would be obvious to modify El-Hamamsy, one of ordinary skill in the art would note that El-Hamamsy discloses that the apertures 82, as shown in Figs. 2 and 3A, have the same diameter and are evenly spaced about a circle. One of ordinary skill in the art would realize that the apertures 82 arranged in the circle are closer to the teaching of the aperture 2d comprised of holes 2c than the combination of the power feeding window 2a and holes 2c provided along the flow path. Therefore, at best, while Mimasu may suggest a size for the apertures 82 of El-Hamamsy, Mimasu certainly does not suggest different sized holes 2c.

Because Mimasu discloses providing aperture 2d comprising holes 2c in a flow path to the lamp 4, discloses only providing the cooling air to lamp 4 in the interior of the device, and

discloses holes 2c as having the same size, the combination of El-Hamamsy in view of Mimasu fails to render independent claim 1 obvious.

As such, Applicants respectfully submit that the combination of elements as set forth in independent claim 1 is not disclosed or made obvious by the prior art of record, including El-Hamamsy and Mimasu, for the reasons explained above. Accordingly, reconsideration and withdrawal of this rejection are respectfully requested.

With regard to dependent claims 2-5, 8, 9, and 25, Applicants submit that these claims depend, either directly or indirectly, from independent claim 1, which is allowable for the reasons set forth above, and therefore these claims are allowable based on their dependence from claim 1, as well as for their additionally recited subject matter.

Allowable Subject Matter

The Examiner states that claims 6 and 7 would be allowable if rewritten in independent form.

Applicants thank the Examiner for the early indication of allowable subject matter in this application; however, claims 6 and 7 have not been rewritten in independent form at this time, because it is believed that independent claim 1 from which these claims depend is allowable.

Request for an Interview

Applicants respectfully request an interview between the Examiner and Applicants' representative be conducted before further action is taken by the Examiner in the present application.

CONCLUSION

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance.

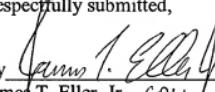
In view of the above amendment, Applicant believes the pending application is in condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Chad D. Wells, Registration No. 50,875 at the telephone number of the undersigned below to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Director is hereby authorized in this, concurrent, and future replies to charge any fees required during the pendency of the above-identified application or credit any overpayment to Deposit Account No. 02-2448.

Dated: December 9, 2010

Respectfully submitted,

By 
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